

## Abstracts

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dressings, a pressure reducing surface, repositioning, and debridement.

**RESULTS:** Our modeling predicted the total expected cost of standard care treatment for a stage 3 pressure ulcer to be \$20,874. Randomized clinical trials have found that NNWT (n = 72 patients) decreases the surface area of stage 3-4 pressure ulcers by 2.5 fold (SD 59%) over standard care (n = 59 patients). The eight-week healing rates for stage 3 ulcers are 71% with NNWT and 54% for standard care. At these healing rates, our modeling for stage 3 pressure ulcers found that for a 40 month time frame NNWT saves \$6,630 (SE \$98) and increases QALYs by 0.10 (SE 0.0005) life years compared to standard care. For stage 4 pressure ulcers, NNWT saves \$15,216 (SE \$186) and increases QALYs by 0.14 (SE 0.001).

**CONCLUSIONS:** NNWT in patients with stage 3 and 4 pressure ulcer is an economically attractive intervention. Additional well-controlled clinical trials are necessary to further define the role of NNWT in the care of chronic wounds.

PEE 1

## PSORIASIS AND EVERYDAY LIFE: FIRST RESULTS

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Psoriasis is a chronic disease, which affects 4.7 % of the French population. Even if it is not a question of a vital prognosis, it is a very invalidating condition in daily life because of the damage to the body image.

**OBJECTIVE:** Evaluate the Quality of Life consequences for patients with psoriasis, in France.

**METHOD:** Four thousand five hundred anonymous questionnaires were sent, via a Patient Support Group acting against Psoriasis (Association Pour la Lutte Contre le Psoriasis, APLCP). The questionnaires consisted of two scales: the Psoriasis Disability Index and 10 questions concerning the treatment and evolution of psoriasis.

**RESULTS:** Twenty-five days after the mailing, 2014 questionnaires (44%) were received. An analysis of the first questionnaire was conducted. The respondents were 54% women, average age was 50 years, and for men, 53 years. The average age at diagnosis for men was 30 years, and for women, 25 years. Women are significantly more adversely affected than men in their everyday activities. Men are significantly more adversely affected than women at work. No difference was observed between men's and women's global scores. Psoriasis seems to incapacitate 16 to 55 year olds in their social relations, leisure activities and how well they keep their house more than it does older subjects. Long-standing psoriasis does not seem to be more of a handicap to people than more recent psoriasis. The global score is similar. However, a clear trend is observed between the age at the moment of diagnosis and the level of incapacity (p = .0176). The younger the indi-

vidual in which psoriasis is diagnosed, the higher the level of incapacity. This is particularly marked in terms of the everyday and leisure scores.

**CONCLUSION:** These results highlight the value of appropriate and relevant psychological and medical environment for children suffering from psoriasis.

PEE 12

## THE WILLINGNESS TO PAY FOR PHARMACOTHERAPY OF ATOPIC DERMATITIS

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**OBJECTIVE:** For patients with atopic dermatitis, long-term treatment is usually unavoidable and various limitations are caused in their daily life. Therefore, the influence on the patient of new, innovative pharmacotherapy for atopic dermatitis is thought to be extremely large from an economic viewpoint. In this study, we attempted to measure willingness to pay (WTP) for the newly developed therapeutic agent, "tacrolimus".

**METHODS:** 1,000 men and women, 20-59 years old and living in the Tokyo metropolitan area, were selected by random sampling for the interview survey. The bidding game method and the take-it-or-leave-it approaches were adopted. Eight patterns of health-care costs for one month (from 625 to 80,000 yen) were allocated to each respondent at random to avoid "starting point bias". We estimated the demand curve, assuming that the log transformation of WTP will be distributed as a logistic function.

**RESULTS:** A total of 431 interviews (43.1% of the candidates) were completed. More than half responded as "yes" to the price of 10,000 yen or less. The demand curve was estimated to be:  $P(x) = 1 / (1 + \exp(-5.5239 + 0.5906 \ln(x)))$ . The median of WTP was 11,537 yen (95% CI: 8,967-14,845).

**CONCLUSION:** It can be interpreted that the average amount people are willing to pay for tacrolimus pharmacotherapy is 11,500 yen a month. This information is considered to be beneficial for clinical decision-making as well as policy decision-making such as price setting and reimbursement decisions.

## NEUROLOGICAL DISORDERS

PND 1

## ASSOCIATION OF FAMILY HARDINESS WITH WORK PRODUCTIVITY AND ACTIVITY IN FAMILIES OF PEDIATRIC PATIENTS WITH EPILEPSY

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**OBJECTIVE:** The Family Hardiness Index (FHI) has been used to glean insight into the functionality of the

family unit (in terms of family commitment, confidence, challenge, and control) as a potential factor influencing outcomes of care for ill children. A potential consequence of care giving is the loss of time or performance in other aspects of the caregiver's life (for instance work or academic productivity).

**METHODS:** We measured family hardness and productivity using validated instruments that provide index measures for each; family hardness index (FHI) and work productivity and activity index (WPAI) in 60 families presenting to a pediatric neurology clinic. The FHI score was used to stratify families into three groups: low hardness (FHI < 40); medium hardness (FHI = 41–50), and high hardness (FHI = 51–60). Participating families were dichotomized into two groups based on WPAI: families whose caregiver reported a WPAI decrement, and families whose caregiver reported no WPAI decrement. Relative odds were calculated using chi-square test of association (univariate) to determine the association of FHI with WPAI. The odds of reporting a WPAI decrement were calculated for each FHI strata compared with the highest FHI stratum.

**RESULTS:** The relative odds, 95% CI ( $p = \text{value}$ ) of reporting a WPAI decrement in the low (FHI  $\leq 40$ ) and medium (FHI 41–50) strata compared to the high (FHI 51–60) stratum were 3.4, 0.3 to 35.0 ( $p = 0.29$ ) and 1.3, 0.3 to 5.4 ( $p = 0.73$ ), respectively.

**CONCLUSION:** Recognizing factors associated with disease burden may allow providers of epilepsy care to offer families additional supportive services that may be associated with important indirect consequences of disease, such as productivity. Although not significant, our results suggest that family hardness might be useful for this purpose, however further validation studies are needed. The influence of seizure severity and therapy type on productivity should also be determined using a multivariate approach.

## PND2

### COMPARISON OF ADVERSE REACTION REPORTS FOR RIVASTIGMINE AND DONEPEZIL USING THE FDA'S ADVERSE EVENT REPORTING SYSTEM

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**OBJECTIVES:** This study is the first to compare adverse reaction reports of rivastigmine and donepezil using real-world data.

**METHODS:** This study uses the 2000 FDA Quarterly Data from the Adverse Event Reporting System (AERS). Total prescription and sales data for rivastigmine and donepezil was utilized to determine the number of patients prescribed each drug. Adverse drug reaction measurements as a proportion of users of each drug were then obtained. Analyses tested proportional differences.

**RESULTS:** The most frequent common adverse reactions were nausea and malaise for rivastigmine, and interac-

tions and convulsions for donepezil. Results show no statistically significant differences between rivastigmine and donepezil in total rate of adverse drug reactions and rate of serious adverse drug reactions. In contrast, the rate of common adverse events found in donepezil was significantly higher compared to its product labeling ( $p < .05$ ). The adverse event rate from drug interactions is significantly higher for donepezil ( $p < .05$ ).

**CONCLUSIONS:** As indicated from the FDA's AERS, similar rates of adverse events and serious adverse events for rivastigmine and donepezil were found. Efficacy and concomitant medication usage should be considerations when selecting therapies for Alzheimer's disease.

## PND3

### COST-EFFECTIVENESS OF DEEP BRAIN STIMULATION IN PATIENTS WITH PARKINSON'S DISEASE

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**OBJECTIVES:** To assess the cost-effectiveness of high frequency stimulation of the subthalamic nucleus (DBS-STN) in patients with idiopathic Parkinson's disease (PD).

**METHODS:** Sixteen PD patients were treated with DBS-STN. Clinical evaluations were done at baseline and at 1, 3, 6 and 12 months following surgery by means of the UPDRS. To evaluate the quality of life we included the Sickness Impact Profile at baseline and at six months after surgery. Relevant economic data were taken from medical records and costs were derived from different German medical economic resources. Costs were determined from the perspective of the health-care provider.

**RESULTS:** Following DBS-STN UPDRS, subscores decreased as well as the sum score of UPDRS. Quality of life improved considerably in PD patients treated with DBS-STN. The physical dimension score ( $p < .009$ ) as well as the overall SIP score was different ( $p < .01$ ) six months after surgery compared to baseline values. Mean costs of DM 40,020 per patient were spent during the 12-month observation period for inpatient and outpatient care. These expenses included the cost for the electronic device for bilateral stimulation. Following DBS-STN, medication was considerably reduced. Mean daily drug costs at baseline were DM  $46.7 \pm 21.8$  and DM  $18.3 \pm 17.7$  at 12 months following DBS-STN. Furthermore, we used cost and UPDRS scores to estimate the incremental cost-effectiveness of DBS-STN relative to baseline treatment patterns. Treatment with DBS-STN had higher costs but was more effective than baseline treatment. The incremental CE ratio for DBS-STN was DM 1.800 for one unit of decrease of the UPDRS.

**CONCLUSIONS:** DBS-STN is an effective treatment, which considerably alleviates the severity and signs and symptoms and improves the quality of life of patients